

# UNCLASSIFIED

AD NUMBER
AD868165
NEW LIMITATION CHANGE
TO Approved for public release, distribution unlimited
FROM Distribution authorized to U.S. Gov't. agencies and their contractors; Administrative/Operational Use; 12 NOV 1969. Other requests shall be referred to Office of the Adjutant General [Army], Washington, DC 20310.
AUTHORITY
AGO ltr 29 Apr 1980

THIS PAGE IS UNCLASSIFIED



DEPARTMENT OF THE ARMY  
OFFICE OF THE ADJUTANT GENERAL  
WASHINGTON, D.C. 20310

IN REPLY REFER TO

AD 868165

AGDA (M) (24 Mar 70) FOR OT UT 694156

14 April 1970

SUBJECT: Operational Report - Lessons Learned, Headquarters, 37th Signal Battalion, Period Ending 31 October 1969

SEE DISTRIBUTION

1. Subject report is forwarded for review and evaluation in accordance with paragraph 4b, AR 525-15. Evaluations and corrective actions should be reported to ACSFOR OT UT, Operational Reports Branch, within 90 days of receipt of covering letter.
2. Information contained in this report is provided to insure appropriate benefits in the future from lessons learned during current operations and may be adapted for use in developing training material.

BY ORDER OF THE SECRETARY OF THE ARMY:

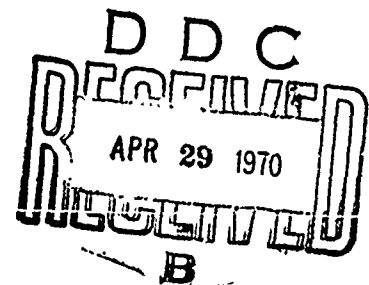
*Kenneth G. Wickham*

KENNETH G. WICKHAM  
Major General, USA  
The Adjutant General

1 Incl  
as

DISTRIBUTION:

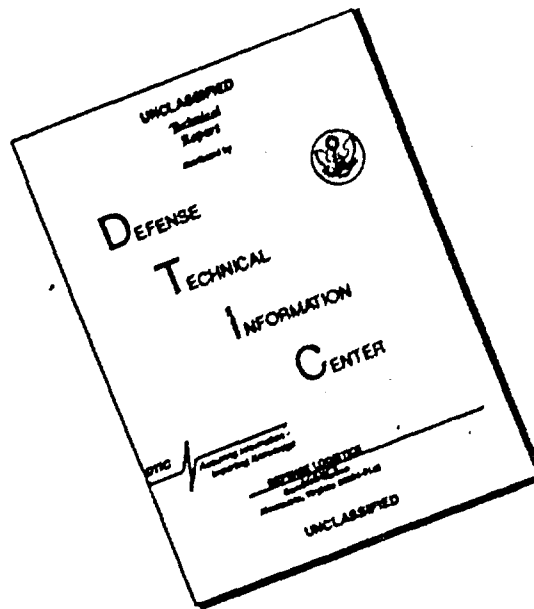
Commanding Generals  
US Continental Army Command  
US Army Combat Developments Command  
US Army Materiel Command  
Commandants  
US Army War College  
US Army Command and General Staff College  
US Army Air Defense School  
US Army Armor School  
US Army Aviation School  
US Army Engineer School  
US Army Field Artillery School  
US Army Infantry School  
US Army Signal School  
US Army Southeastern Signal School



UNCLASSIFIED REPORT  
DISTRIBUTION NO FOREIGN WITHOUT APPROVAL OF  
ASSISTANT CHIEF OF STAFF FOR FORCE DEVELOPMENT  
(ARMY) ATTN FOR OT UT. WASHINGTON, D.C. 20310

Reproduced by the  
CLEARINGHOUSE  
for Federal Scientific & Technical  
Information Springfield Va. 22151

# DISCLAIMER NOTICE



THIS DOCUMENT IS BEST QUALITY AVAILABLE. THE COPY FURNISHED TO DTIC CONTAINED A SIGNIFICANT NUMBER OF PAGES WHICH DO NOT REPRODUCE LEGIBLY.

DEPARTMENT OF THE ARMY  
Headquarters, 37th Signal Battalion(Spt)  
APO 96337

SCCFV-FV-DN-OP

12 November 1969

SUBJECT: Operational Report Lessons Learned, 37th Signal Battalion (Spt)  
Period ending 31 October 1969 (RCS CSFOR-5) (R-2)

1. Section 1, Operations: Significant Activities.

- a. The 37th Signal Battalion's mission is to provide Corps Area Communications support to III MAF, U.S. Army tactical and logistical forces, the advisory effort, and other free world forces and agencies throughout the southern half of the I Corps Tactical Zone (ICTZ). This Battalion also operates tactical tropospheric scatter and microwave systems, as directed, throughout the entire ICTZ, and performs other communications missions as assigned by the Commanding Officer, 12th Signal Group.
- b. On 8 August 1969, Da Nang Signal Battalion was reorganized as the Da Nang Signal Company and assigned to the 37th Signal Battalion.
- c. On 17 September 1969, CPT James L. Rayburn assumed command of Company C, replacing CPT Presidio F. Padron, who was reassigned to Hawaii.
- d. On 23 October 1969, CPT Robert N. Seltzer was assigned as Battalion S-1 replacing 1LT Joseph P. Sebo Jr., due to rotate to CONUS. CPT Pedro M. Mudarra assumed command of the 337th Signal Company replacing CPT Victor W. Parades who assumed duties as assistant S-3.
- e. During the past quarter, the following positions were filled by new personnel:
  - (1) Commanding Officer, Company C
  - (2) Battalion S-1
  - (3) Commanding Officer, 337th Signal Company

The only unit organizational change during the quarter was the addition of the Da Nang Signal Company to the battalion.

f. Overall personnel strength showed a definite increase for the 37th Signal Battalion during the past quarter. With the assignment of over 200 new personnel within the last six weeks of the quarter, the battalion strength rose to within 100 men of its authorized strength.

Inclosure

12 November 1969

SUBJECT: Operational Report Lessons Learned, 37th Signal Battalion (Spt)  
Period ending 31 October 1969 (RCS CSFOR-5) (R2)

g. Although the battalion's personnel strength is increasing, there are still MOS's which fall into the critical range due to the lack of requisition fill. Fill was inadequate in the following MOS's:

- (1) 31L \*\*
- (2) 31M \*
- (3) 31N \*
- (4) 32D
- (5) 32F \*
- (6) 36G
- (7) 72C \*
- (8) 76Y40 \*\*
- (9) 94B40

NOTES: \* Reported for the second consecutive quarter.  
\*\* Reported for the third consecutive quarter.

h. The turnover in personnel occurred as follows:

LOSSESGAINS

Officers 11 (1 MAJ, 2 CPT, 8 LT)

6 (1 MAJ, 2 CPT, 3 LT)

WO 4

3

EM 193

259

i. Appointments: Promotion allocations have been adequate to allow promotions against most vacancies. More allocations authorizing promotions to grades E-4 and E-5, without regard to position vacancy, would enhance the program and tend to improve the promotion percentage of personnel eligible.

j. Awards and Decorations: The following awards and decorations were approved at the end of the quarterly period:

<u>Award/Decoration</u>	<u>Requested</u>	<u>Approved</u>	<u>Pending</u>
Bronze Star	85	77	8
Army Commendation Medal	102	87	15
Certificate of Achievement	53	53	0

k. Listed below are the major accomplishments of the 37th Signal Battalion during the quarter ending 31 October 1969. The 37th Signal Battalion was operational for the entire 92 days of the past quarter.

INCL

12 November 1969

SUBJECT: Operational Report Lessons Learned, 37th Signal Battalion (Spt)  
Period ending 31 October 1969 (RCS CSFGR-5) (R2)

- (1) On 27 August 1969, microwave system FFM10 from Quang Tri Air to Quang Tri City was deactivated. This Corps Area System was originally installed as back up for a cable.
- (2) On 17 September 1969, DCA VHF System 77UHN5 from Chu Lai to Quang Ngai was deactivated. Prior to deactivation, all circuits were rerouted. This freed vitally needed equipment without degradation of communications.
- (3) On 20 September 1969, DCA System 77UHB4 from Tam Ky to Hoi An was deactivated. Prior to deactivation, all circuits were rerouted. This freed equipment for other uses without degradation of communications.
- (4) On 28 September 1969, A microwave system was installed between Phu Bai and Camp Eagle to replace a badly deteriorated cable system. For the first time, 45 channels of high quality, reliable communications are available to Camp Eagle (101st Abn Div).
- (5) On 8 October 1969, the new signal site, Hawk Hill, (196th Light Infantry Brigade) became fully operational. The entire site consisting of two UHF radio systems to Chu Lai and an AN/MTC-1 switchboard was transferred from Hoi An South (LZ Baldy). It was especially difficult moving due to the fact both sites had to be operational at the same time. The problems were greatly reduced by close coordination and pooling of resources of this battalion and the 523d Signal Battalion, Americal Division.
- (6) On 19 October 1969, DCA system 77UHB5 from Tam Ky to Chu Lai was converted from AN/TRC-24 radio to AN/GRC-50 radio. This was made possible by the deactivation of the 77UHB4 system on 20 September 1969. The conversion to the AN/GRC-50 radio meant greater reliability for the system.
- (7) On 24 October 1969, the 37th Signal Battalion began operation of its MARS station. This station, the first Army MARS station in the Da Nang Area, provides emergency HF back up radio as well as being an outstanding morale factor for all military personnel in the Da Nang Area.
- (8) On 23 October 1969, the battalion began to test tropospheric scatter radio from DaNang to Quang Tri Army. The test is still continuing. The results, using 10 foot antennas, were marginal and the test is now being conducted using 29 foot antennas.

INCL

12 November 1969

SUBJECT: Operational Report Lessons Learned, 37th Signal Battalion (Spt)  
 Period ending 31 October 1969 (RCS CSFCR-5) (R-2)

(9) On 27 October 1969, the battalion installed microwave system FFM04 between Dong Ha West and Quang Tri Army. The system was installed to replace system FFM08.

(10) As of 31 October 1969, the following facilities were operated by the 37th Signal Battalion.

(a) Long Lines Communications:

<u>1</u>	VIF Systems (12 Channel)	5
<u>2</u>	UHF Systems (12 Channel)	3
<u>3</u>	UHF Systems (24 Channel)	2
<u>4</u>	Tropo Systems (24 Channel)	3
<u>5</u>	Tropo Systems (48 Channel)	2
<u>6</u>	Microwave Systems (45 Channel)	3
<u>7</u>	VHF circuits	226
<u>8</u>	Teletype circuits	46
<u>9</u>	EAC circuits	4
<u>10</u>	SECORD circuits	4

(b) Communication Centers:

<u>1</u>	Major Relays	1
<u>2</u>	Minor Relays	1
<u>3</u>	Tributary Stations	9

(c) Telephone Switchboards:

<u>1</u>	200 Line Manual Switchboards	4
<u>2</u>	120 Line Manual Switchboards	1
<u>3</u>	60 Line Manual Switchboards	2

(d) SECORD Switchboards: 1

(e) HF RTT Stations 8

1. Training: In addition to training on subjects listed on the Master Training Schedule, the following special training classes were conducted for the quarter ending 31 October 1969:

- (1) Junior Officer Orientation Course
- (2) Weapons Familiarization and Safety
- (3) Drug Abuse
- (4) Vehicle Safety
- (5) Proper use of Concertina wire and Bunker Construction.

SUBJECT: Operational Report Lessons Learned, 37th Signal Battalion (Spt)  
Period ending 31 October 1969, (KCS CSFOR-5) (R-2)

m. Intelligence:

- (1) Enemy Activity involving elements of the 37th Signal Battalion decreased sharply during the quarter. There were two reported incidents of enemy activity resulting in 1 WHA and no equipment damage.
- (2) The security posture of all Sites remain good. Security SOP's have been updated and improvements in base defenses are continually being made. All required security inspections have been performed.
- (3) No security violations occurred during the quarter.

2. Section 2, Lessons Learned: Commander's Observation, Evaluations, and Recommendations.

a. Personnel: None

b. Intelligence: None

c. Operations:

(1) Eliminating Difference in Ground Potential

- (a) OBSERVATION: It has been noted that some circuit difficulty has been caused by a difference in ground potential between two points on the same circuit.
- (b) EVALUATION: Circuit problems have been cleared up when all equipment in the same area was grounded to a common ground.
- (c) RECOMMENDATION: That all communications equipment in the same general area be connected to a common grounding point.

(2) Concrete Covering for Bunkers

- (a) OBSERVATION: When exposed to the elements, sandbags on bunkers and revetments deteriorate rapidly and must be frequently replaced. If the sandbags are covered with "chicken wire", a one-half inch layer of cement can be put on like a stucco.
- (b) EVALUATION: By covering the bunker or revetment with cement over the sandbags, the sandbags are not exposed to the elements and last much longer.



12 November 1969

SUBJECT: Operational Report Lessons Learned, 37th Signal Battalion (Spt)  
Period ending 31 October 1969, (RCS CSFOR-5) (R-2)

- (c) RECOMMENDATION: That all bunkers and revetments of a semi-permanent nature be covered with cement to reduce deterioration of sandbags.
- (3) Securing AN/TRC-24 Antennas to AB-216 Towers
- (a) OBSERVATION: At many VHF sites, AB-216 towers are available for mounting of AN/TRC-24 antennas. This method is preferable due to ease in maintaining the antenna. The problem is encountered in mounting the antenna to the tower. This is overcome by mounting the antenna on one mast section and securing the mast section to the tower with U-clamps, such as muffler clamps.
  - (b) EVALUATION: Mounting of AN/TRC-24 antennas to AB-216 towers with U-clamps provides a stable mounting and facilitates antenna maintenance.
  - (c) RECOMMENDATION: That this method of mounting antennas receive wide dissemination.
- (4) Central POL Source for Generator
- (a) OBSERVATION: Often fuel is supplied from a central fuel source rather than the individual tanks on the generators.
  - (b) EVALUATION: Due to generator shed construction or other factors it is many times unfeasible to use a gravity feed system.
  - (c) RECOMMENDATION: By connecting a fuel line from the central fuel source to the fuel pump on the generator, fuel may be pumped to the generator.
- (5) Temporary Disconnection of SECORD Subscribers
- (a) OBSERVATION: No suitable method exists for temporarily disconnecting SECORD subscribers.
  - (b) EVALUATION: When a subscriber is disconnected from the SECORD, he cannot be reinstated until proper authentication is received. A method of disabling the circuit is necessary to prevent unauthorized entry from occurring.

12 November 1969

SUBJECT: Operational Report Lessons Learned, 37th Signal Battalion (Spt)  
Period ending 31 October 1969(RCS CSFGR-5) (R-2)

- (c) RECOMMENDATION: To provide a positive visible method for disconnecting subscribers temporarily, remove the plug from a patchcord and use it to block the subscriber's jack. When the user is ready to authenticate, you can restore service by removing the plug and the cord can be replaced on the plug.

(6) Modification of AN/TCC-7 to provide 24 channels on one AN/GRC-50 Radio

- (a) OBSERVATION: There are several locations in the battalion where two 12 channel systems connect the same sites, each site using a separate AN/GRC-50 radio system. The AN/TCC-7 terminal equipment has an output of 48 KHz while the AN/GRC-50 radio is capable of accepting a 240 KHz baseband.
- (b) EVALUATION: One AN/TCC-7 system is connected to the radio in the normal manner. The signal from the second AN/TCC-7 system is taken out in the 60-108 KHz range and amplified by the AR-4 amplifier in the group panel. The transmit pair of wires is connected to the DEM OUT jacks on the group panel and the receive pair of wires is connected to the 60-108 Kc IN posts on the TA-227 Modem. These wires are connected in parallel with the other AN/TCC-7 system. The double system has been in operation for over 1 month and has proven exceptionally stable. The modifications performed can be changed back to the original configuration in a manner of minutes by an authorized radio mechanic (Incl 1).
- (c) RECOMMENDATION: That the modification of the AN/TCC-7 be authorized as a "field-fix" and receive wide dissemination. It is especially useful in making maximum utilization of all AN/GRC-50 radio sets available.
- (d) Organization: None
- (e) Training: None
- (f) Logistics: None

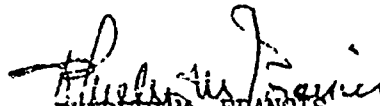
SCCFV-PG-DN-OP

12 November 1969

SUBJECT: Operational Report Lessons Learned, 37th Signal Battalion (Spt)  
Period ending 31 October 1969, (RCS CSFOR-5) (R-2)

- g. Communications: None
- h. Materials: None
- i. Others: None

1 Incl  
ds

  
PHILLIP M. FRANCIS  
LTC, SigO  
Commanding

DISTRIBUTION:  
2-USARPAC  
1-USASTRATCOM  
3-USARV  
1-1st Signal Brigade  
5-12th Signal Group

SCCPV-PGOI (31 Oct 1969) 1st Ind

SUBJECT: Operational Report of the 37th Signal Battalion (SPT) for the  
Period Ending 31 October 1969 (RCS CSFOR-65) (R2)

DA, HQ, 12th Signal Group, APO 96308

TO: Commanding General, 1st Signal Brigade  
(1ST SIG BRG), ATTN: CCOWP,  
APO 96304

20 November 1969

1. Subject report is forwarded in accordance with 1st Signal Brigade  
Regulation 1-12.

2. This headquarters has reviewed the report and concurs in it as in-  
dorsed with the following comment. Paragraph 6, page 7, indicates that  
the system has proven exceptionally stable. However, this system has not  
been fully utilized, and, therefore, this is not a true test of its stability  
in strapping a 24-channel carrier system to an AN/GRC-50 radio.

*A. B. Crawford, Jr.*  
A. B. CRAWFORD, JR.  
Colonel, SigC  
Commanding

SCCPV-OP-AD (12 Nov 69) 2d Ind

SUBJECT: Operational Report - Lessons Learned, Headquarters, 37th  
Signal Battalion for Period Ending 31 October 1969, RCS  
CSFOR-65 (R2)

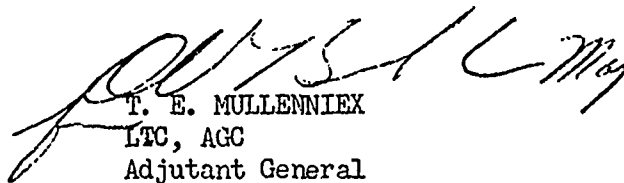
DA, HQ, 1st Signal Brigade (USASTRATCOM) APO 96384 13 December 1969

TO: Commanding General, United States Army, Vietnam, ATTN: AVHGC-DST,  
APO 96375

1. Subject report is forwarded in accordance with AR 525-15.

2. The following comment is made: Reference item "MOS Shortage",  
Para 1 g, Page 2: Signal MOS's remain consistantly short through-  
out the Brigade, as input of these MOS's continues at a slow rate  
of fill. Since the reporting period the overall posture of these  
MOS's has improved slightly and it is anticipated that our strength  
in these MOS's should remain stable within the next few months,  
Special emphasis has been placed on filling requirements of MOS's  
76Y and 94B, resulting in sufficient personnel having been assigned  
to the 12th Signal Group subsequently to the reporting period to  
eliminate these two (2) MOS shortages.

FOR THE COMMANDER:

  
T. E. MULLENNIEX  
LTC, AGC  
Adjutant General

CF:

Commanding General, United States Army Strategic Communications  
Command, ATTN: SCC-OPS-RT, Fort Huachuca, Arizona 85613  
Commanding Officer, 12th Signal Group, APO 96308  
Commanding Officer, 37th Signal Battalion, APO 96337

AVHGC-DST (12 Nov 69) 3d Ind  
SUBJECT: Operational Report-Lessons Learned, 37th Signal Battalion (Spt)  
Period Ending 31 October 1969, (RCS CSFOR-65) (R-2)

HEADQUARTERS, UNITED STATES ARMY, VIETNAM, APO San Francisco 96375 1 : 10 1970

THRU: Commanding General, United States Army Strategic Communications  
Command-Pacific, APO 96557

TO: Commander in Chief, United States Army, Pacific, ATTN: GPOP-WF,  
APO 96558

1. This headquarters has reviewed the Operational Report-Lessons Learned for the quarterly period ending 31 October 1969 from Headquarters, 37th Signal Battalion (Spt) and comments of indorsing headquarters.

2. Comments follow:

a. Reference item concerning "Eliminating Difference in Ground Potential", page 5, paragraph 2c(1); concur. This problem has become a matter of command interest. Action will be taken by 1st Signal Brigade to insure that this information is disseminated.

b. Reference item concerning "Concrete Covering for Bunkers", page 5, paragraph 2c(2); nonconcur. The strike of a projectile on the cemented surface will cause spalling which may create additional hazards for the bunker occupants. In addition the surface will conceal any void caused by deterioration of the sandbags or water intrusion, thus preventing an accurate determination of the degree of protection provided by the bunker.


c. Reference item concerning "Securing AN/TRC-24 Antennas to AB-216 Towers", page 6, paragraph 2c(2); concur. The 37th Signal Battalion should prepare an article, with photographs, for inclusion in USARV Pam No. 105, Command Communications.

d. Reference item concerning "Modification of AN/TCC-7 to provide 24 channels on one AN/GRC-50 Radio", page 7, paragraph 2c(6); concur with 1st Indorsement. The 37th Signal Battalion should conduct a test, using system #1 and #2 with all channels in use. This is to be considered as a field expedient and used only where other equipment is not available.

FOR THE COMMANDER:

1 Incl added  
2. Org Chart

Cy furn:  
37th Sig Bn  
1st Sig Bde

  
C. E. MICHELS  
MAJ, AGC  
Assistant Adjutant General

//

SCCP-OP3 (12 Nov 69) 4th Ind


SUBJECT: Operational Report Lessons Learned, 37th Signal  
Battalion (Spt) for Period Ending 31 October  
1969 (RCS CSFOR-65) (R2)

Headquarters, United States Army Strategic Communications  
Command-Pacific, APO San Francisco 96557 1 4 FEB 1970

TO: Commander in Chief, United States Army, Pacific, ATTN:  
GPOP-DT, APO 96558

1. Subject report is forwarded in accordance with AR 525-15.
2. This headquarters has reviewed and concurs with subject report as indorsed.

FOR THE COMMANDER:

  
FRANK C. MAHIN  
COL, GS  
Chief of Staff

CF: wo Incl  
CG, USARV, APO 96375  
CG, 1st Sig Bde (USASTRATCOM), APO 96384  
CO, 12th Sig Gp (USASTRATCOM), APO 96308  
CO, 37th Sig Bn (USASTRATCOM), APO 96337

GPOP-DT (12 Nov 69) 5th Ind  
SUBJECT: Operational Report of HQ, 37th Signal Battalion (Spt) for Period  
Ending 31 October 1969, RCS CSFOR-65 (R2)

HQ, US Army, Pacific, APO San Francisco 96558 17 FEB 70

THRU: Commanding General, US Army Strategic Communications Command,  
Fort Huachuca, Arizona 85613

TO: Assistant Chief of Staff for Force Development, Department of the  
Army, Washington, D. C. 20310

This headquarters concurs in subject report as indorsed.

FOR THE COMMANDER IN CHIEF:



C. L. SHORTT  
CPT, AGC  
Asst AG

CF:  
DA, ACSFOR  
CG, USASTRATCOM-PAC



SCC-PO (12 Nov 69) 6th Ind

SUBJECT: Operational Report of HQ, 37th Signal Battalion (SPT) for  
Period Ending 31 October 1969, RCS CSFOR-65 (R2)

Headquarters, United States Army Strategic Communications Command, Fort  
Huachuca, Arizona 85613 1 3 MAR 1970

TO: Assistant Chief of Staff for Force Development, Department of the  
Army, Washington, D. C. 20310

This headquarters concurs in subject report as indorsed.

FOR THE COMMANDER:

*M. G. Alderson*

W. O. POLSTON

Maj, MC

Asst. Dir. Gen

DEPARTMENT OF THE ARMY  
Headquarters, 37th Signal Battalion (Spt)  
APO San Francisco 96337

SCCPV-PG\_DN-OP

24 October 1969

SUBJECT: Modification of AN/TCC-7 Telephone Terminal to provide 24 FDM Channels on one Radio System.

MEMORANDUM FOR: RECORD

1. Reference: TM 11-2139-35, November 1958

2. GENERAL: The AN/TCC-7 provides a baseband signal of 12-60 KHz (FDM), an orderwire channel and a 68 KHz Sync signal. Initially the AN/TCC-7 multiplexes the 12 channels in the 60-108 KHz range and converts them in the group panel to the 12-60 KHz range. By operating one AN/TCC-7 normally and taking the signal from the second AN/TCC-7 prior to final conversion, 24 FDM channels can be obtained in the 12-108 KHz range. This Battalion applied the 24 voice channels to an AN/GRC-50 VHF radio system and obtained superior results with no decrease in signal quality. The 68 KHz signal on the lower 12 channel AN/TCC-7 is used as the master system and the upper 12 channel AN/TCC-7 is the slave. Initial lineup is extremely critical and the lineup procedures in the operator's manual must be followed exactly. After correct line up, the system has been found to be extremely stable. Another requirement is a well aligned radio system. Order wire is maintained in both AN/TCC-7 systems, however, they are in parallel with each other.

3. METHOD: To simplify the description of this modification, a section of figures 46 and 49, TM 11-2139-35 is included which indicates where the upper 12 channels (60-108 KHz) are tapped off for combining with the lower 12 channels (12-60 KHz) of a normal AN/TCC-7 to provide the 24 channel (12-108 KHz) baseband. For convenience, the lower 12 channels will be referred to as System #1 and the upper 12 channels as System #2.

a. System #1: The AN/TCC-7 is connected from the normal SP4 connector, J103, on the junction panel, via SP4 cable, to the transmit and receive binding post on the AN/GRC-50 in the normal manner.

b. System #2: In order for the receive level of System #2 to be boosted to the proper level, the signal must be amplified. This is accomplished by utilizing the modem and amplifier AR4 (part of the group panel). Input coupling transformer T3 and output coupling transformer T5 are disconnected at the 6 points shown on Inclosure 1. The two transformers are then coupled by connecting points 1 of T3 and T5, and points 3 of TR3 and TR5.

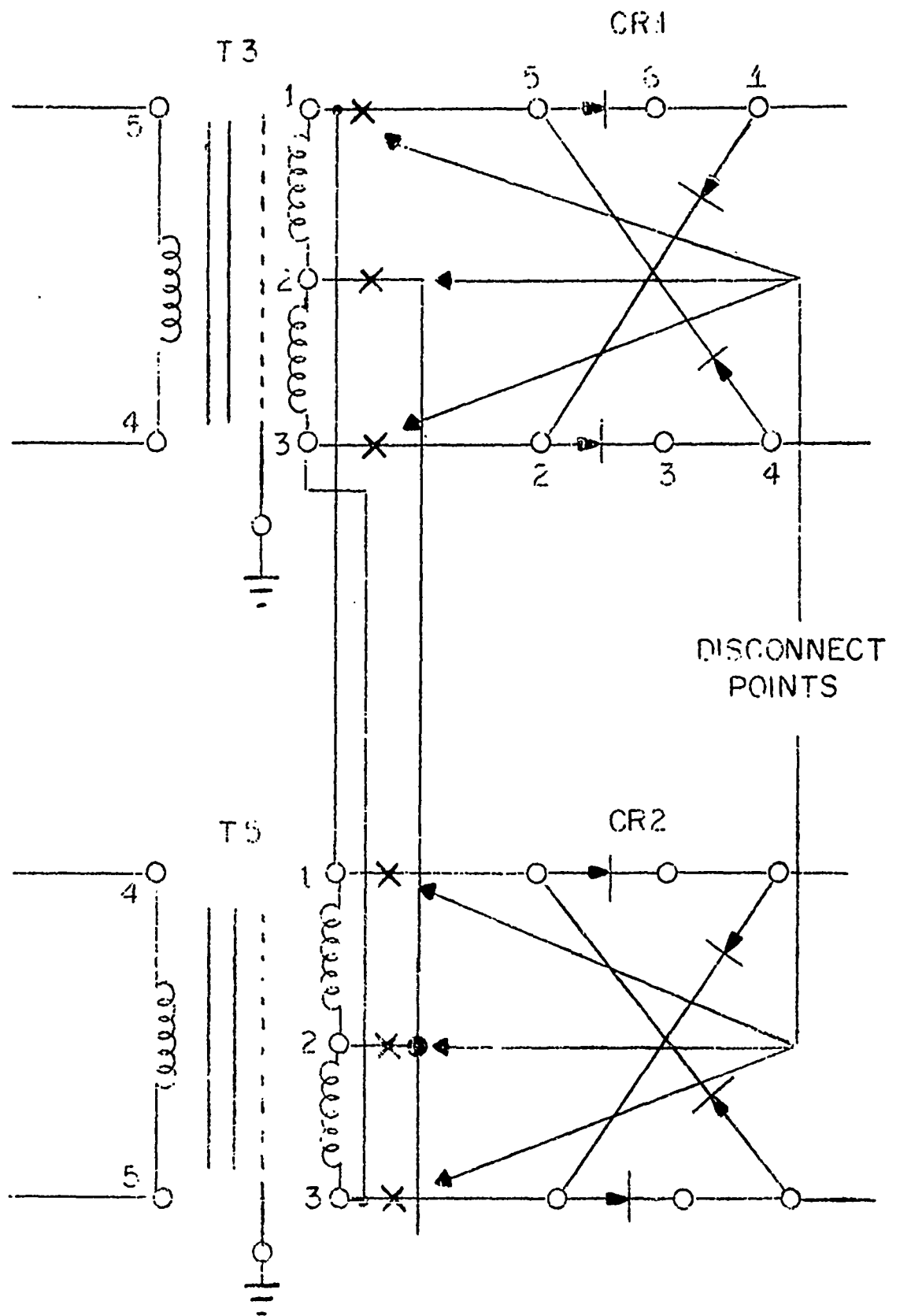
SCCPV-PG-DN-IN

24 October 1969

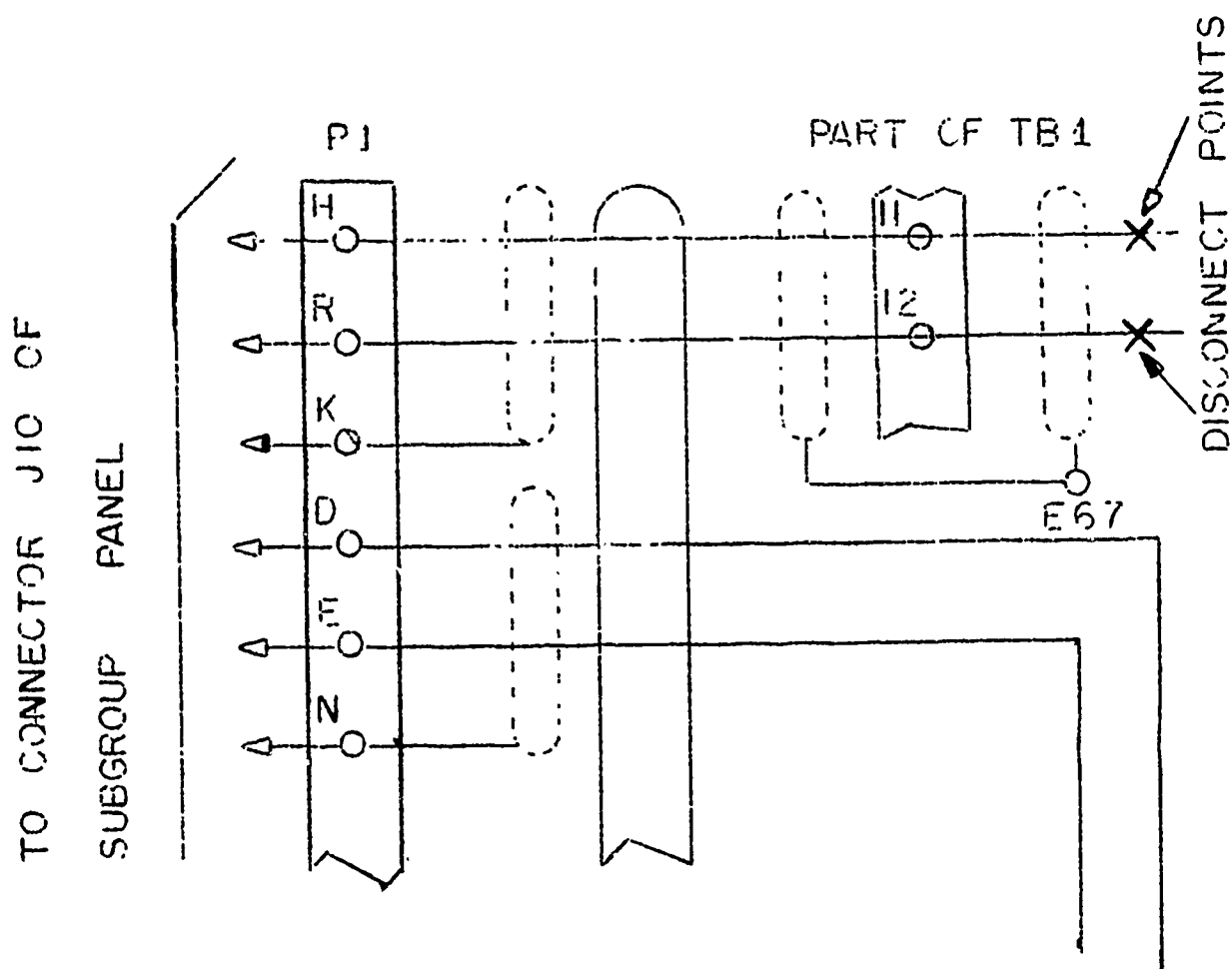
SUBJECT: Modification of AN/TCC-7 Telephone Terminal to  
provide 24 FDM channels on one Radio System.

In the group panel (part of AM-707) disconnect pins 11 and 12 in terminal board TB1 (see Inclosure 2) to prevent the receive signal from reaching the group panel. Remove the 120 KHz oscillator tube V16 from the carrier supply panel, TA-228, to prevent damage to the modulator. Connect Sync jacks in the carrier supply panel, TA-228, System #1 to carrier supply panel Sync jack, System #2, to use 68 KC for both systems. Connect the "D.M OUT" binding posts in the AM-707 group panel to the transmit binding posts on the AN/GRC-50 and connect the "60-108 KC IN" binding posts on the TA-227 telephone modem to the receive binding posts on the AN/GRC-50. System #1 and System #2 are connected to the AN/GRC-50 in parallel.

*Cedric J. Zabriskie*  
CEDRIC J. ZABRISKIE  
Major, SigC  
S 2/3 Officer

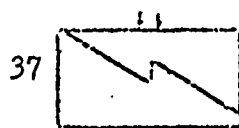


Partial Schematic Modem and Amplifier AR4 (Part of Group Panel) (Fig.43, TM11 2139-35)

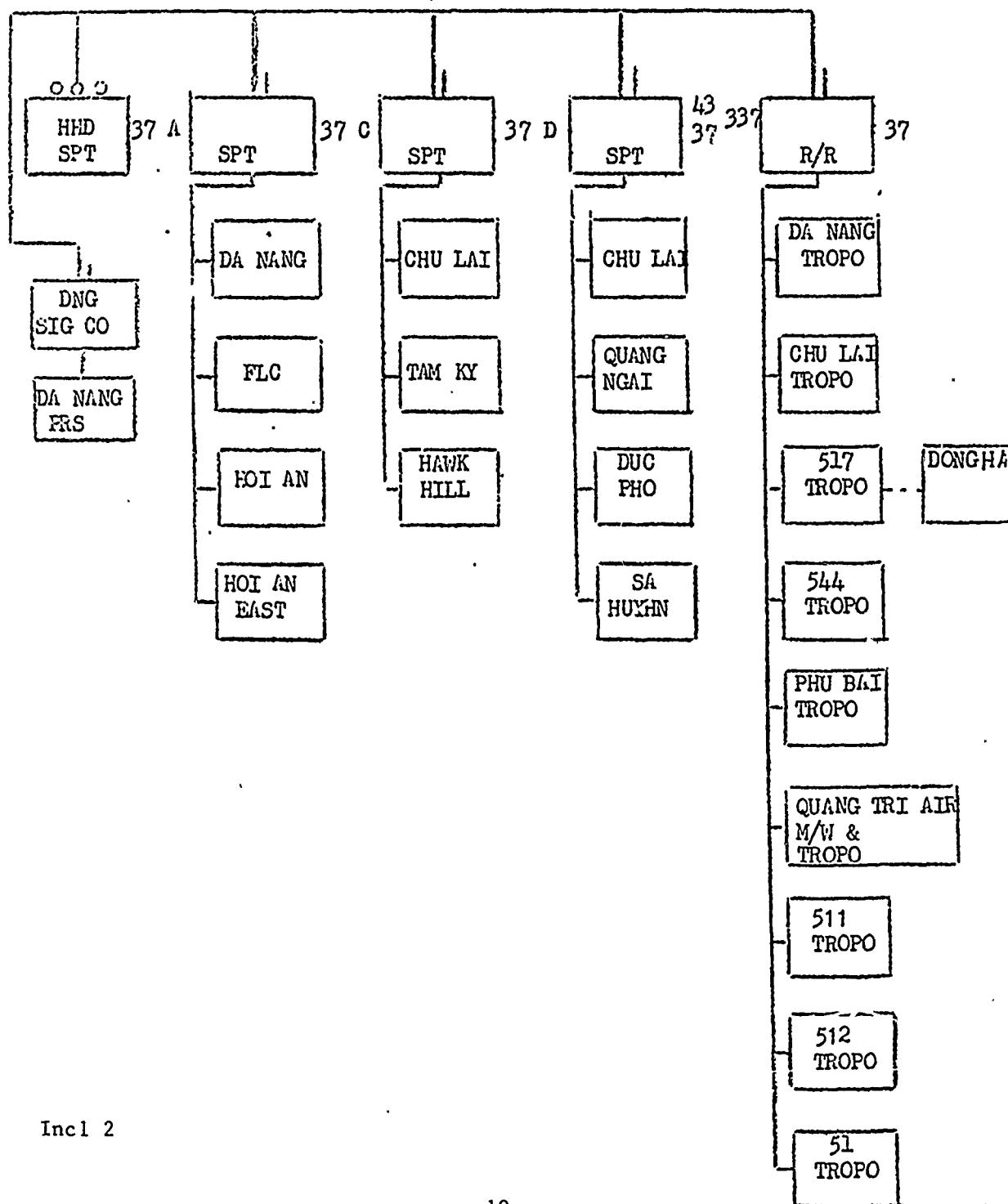


Partial Schematic of Group Panel (Part of AM-707)  
(Fig. 46, TM 11-2139-35)

# ORGANIZATIONAL STRUCTURE



## 37TH SIGNAL BATTALION (SPT)



Incl 2

UNCLASSIFIED

Security Classification

DOCUMENT CONTROL DATA - R & D		
<i>(Security classification of title, body of abstract and indexing annotation must be entered when the overall report is classified)</i>		
1. ORIGINATING ACTIVITY (Corporate author)		2a. REPORT SECURITY CLASSIFICATION
HQ, OACSFOR, DA, Washington, D.C. 20310		UNCLASSIFIED
		2b. GROUP
3. REPORT TITLE		
Operational Report - Lessons Learned, HQ, 37th Signal Battalion		
4. DESCRIPTIVE NOTES (Type of report and inclusive dates)		
Experiences of unit engaged in counterinsurgency operations, 1 Aug 69 to 31 Oct 69.		
5. AUTHOR(S) (First name, middle initial, last name)		
CO, 37th Signal Battalion		
6. REPORT DATE	7a. TOTAL NO. OF PAGES	7b. NO. OF REFS
12 November 1969	22	
8a. CONTRACT OR GRANT NO.	8b. ORIGINATOR'S REPORT NUMBER(S)	
	694156	
b. PROJECT NO.		
N/A		
c.	9a. OTHER REPORT NO(S) (Any other numbers that may be assigned this report)	
d.		
10. DISTRIBUTION STATEMENT		
11. SUPPLEMENTARY NOTES		12. SPONSORING MILITARY ACTIVITY
N/A		OACSFOR, DA, Washington, D.C. 20310
13. ABSTRACT		

20

DD FORM 1473  
1 NOV 65

UNCLASSIFIED

Security Classification